

# Exhibit to Agenda Item # 2

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Board Energy Resources & Customer Service Committee Meeting  
and Special SMUD Board of Directors Meeting

Wednesday, January 15, 2020 scheduled to begin at 5:30 p.m.

SMUD Headquarters Building, Auditorium

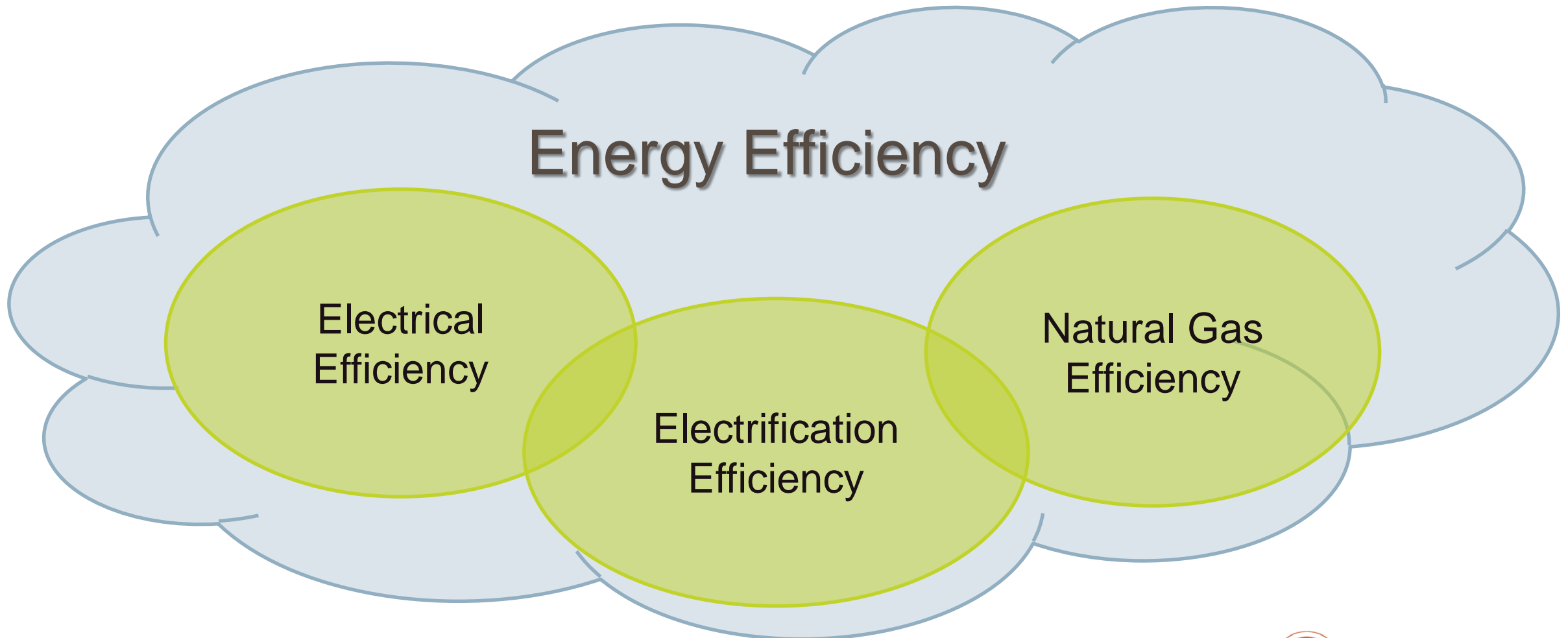
# Energy Efficiency: Historical Perspective

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- Faster & cost-effective way to meet increasing electricity demand
- Manage peak demand which defers capital expenditures
- Offer a way for our customers to save on their utility bills
- Required through various state statutes

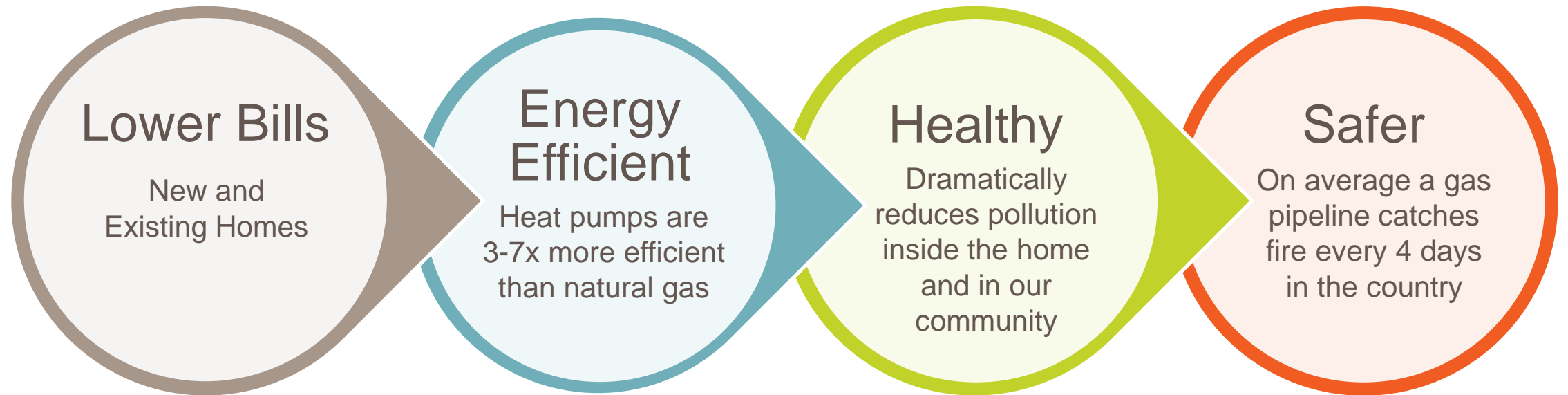
# Energy Efficiency Paradigm is Expanding

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# Why Building Electrification

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# Policy Actions on Building Decarbonization

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22 local jurisdictions in California have adopted ordinances requiring or encouraging all-electric new construction

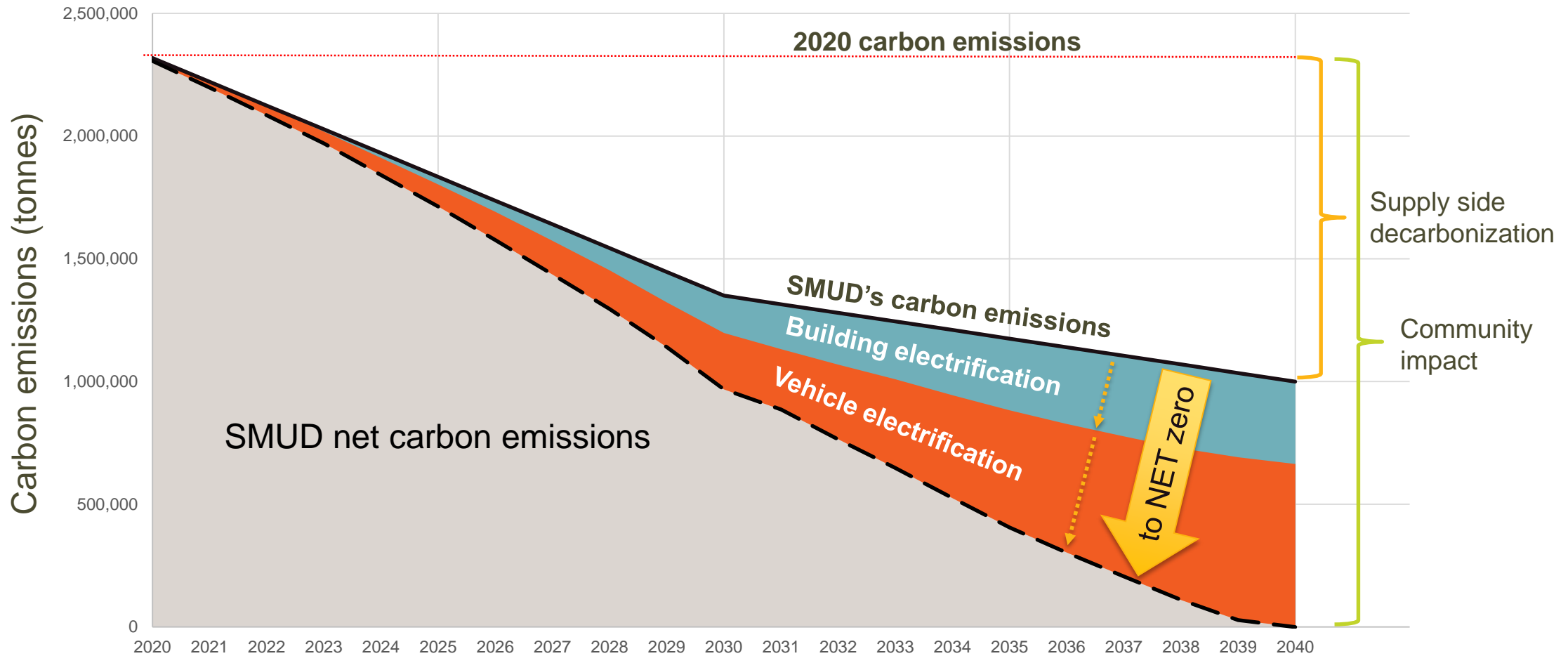


40+ local jurisdictions considering ordinances for adoption within the next year



Unanimous support from Sacramento's Mayors' Climate Commission for an all-electric ordinance

# IRP Plan to Achieve Net Zero Carbon



# Current SD-9 and the IRP

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## SD-9: Current Goal

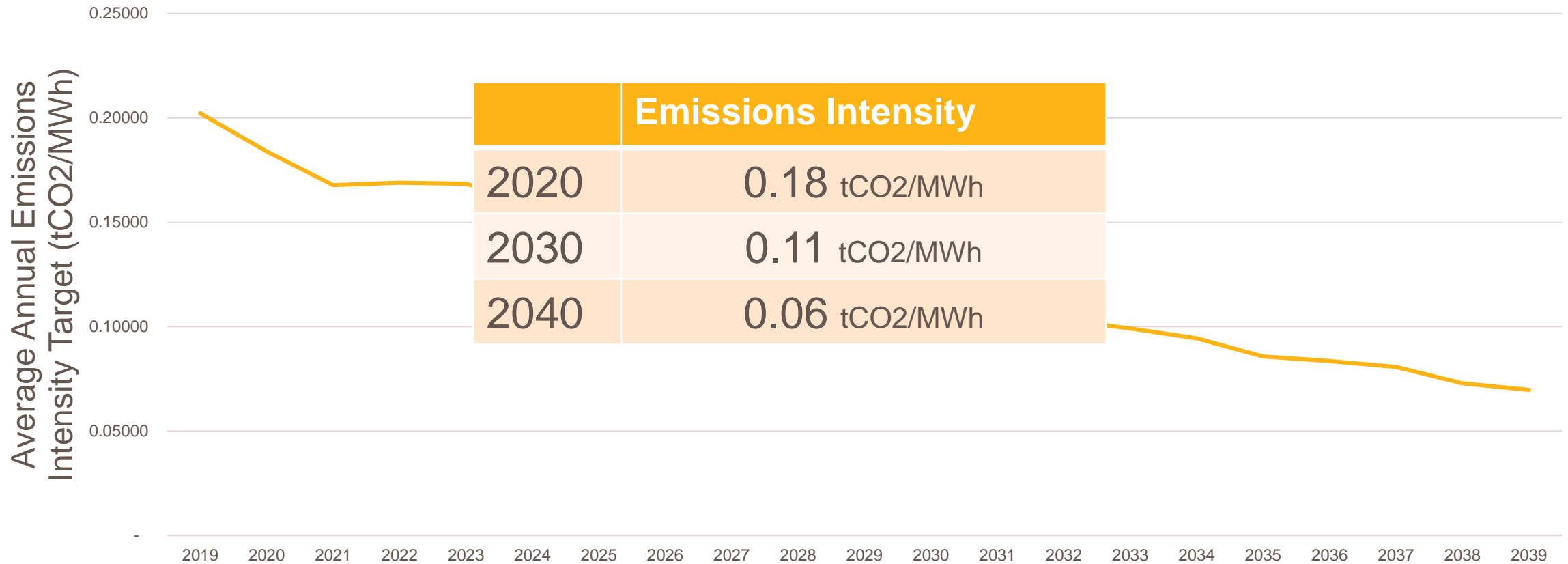
- Achieve energy efficiency savings of 1.5% of the retail energy sales



## 2018 IRP: Net Zero Carbon Emission by 2040

- Carbon equivalent of approximately 3.1% of the average annual retail energy sales

# Power Supply Portfolio Emissions Intensity





# Why Carbon as a Metric

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Old metric of GWh is obsolete in the paradigm of reducing carbon emissions

Carbon aligns both traditional EE with electrification EE under a common metric

Aligns SMUD with the CEC, CPUC & CARB's Fuel Substitution Working Group's anticipated carbon approach to measure statewide EE

# Proposed SD-9 Language

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a) **Achieve overall energy efficiency** for our customers to **maximize carbon reduction** consistent with our net zero carbon target.

We are establishing the following goals for carbon reduction associated with building decarbonization:

Year	Attributable Building Decarbonization (metric tons)
2030	75,000
2040	330,000

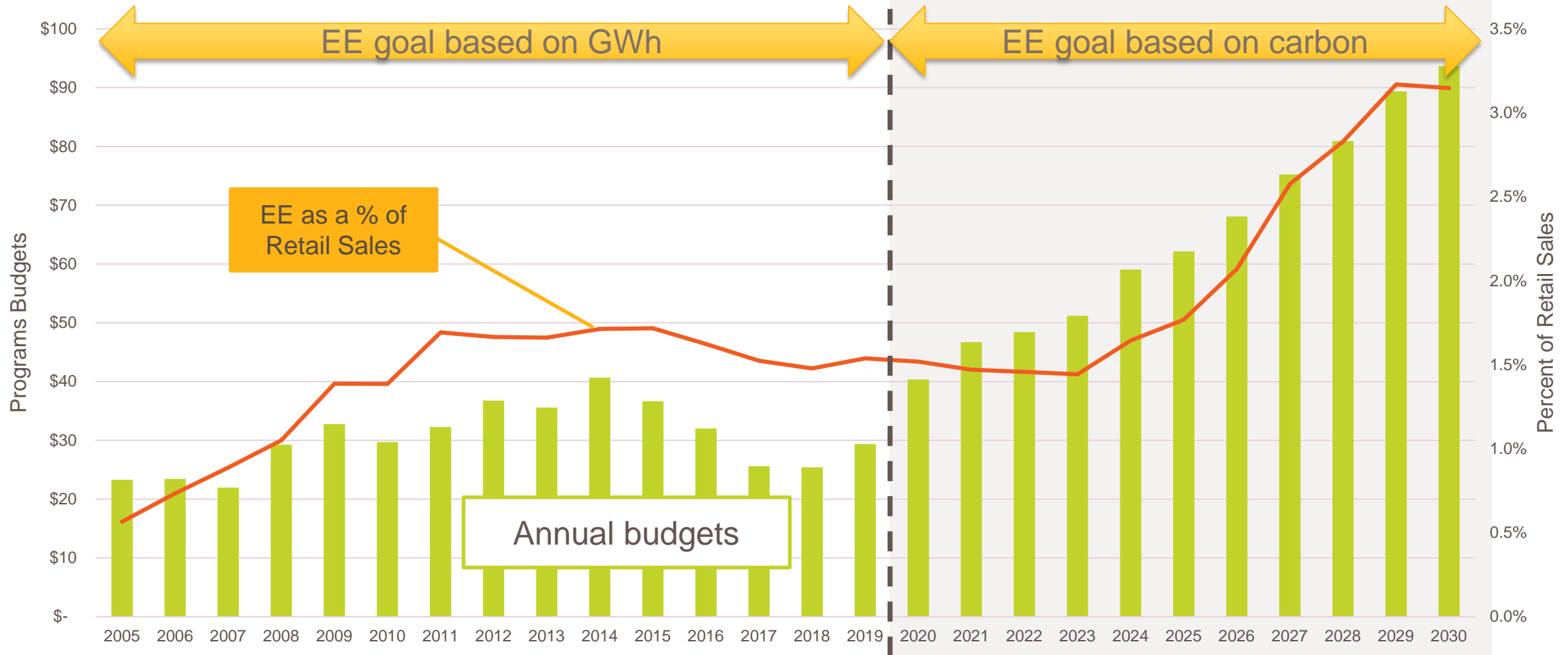
# Implications of Changes to SD-9

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First Year GWh Savings	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Proposed SD-9	157.9	153.1	152.0	151.0	173.0	187.2	220.8	277.5	309.1	351.3	353.8
Current SD-9 (Pre-IRP)	155.3	150.3	150.0	150.3	150.3	150.1	150.4	150.1	150.3	151.3	150.5

The proposed SD-9 goal exceeds the current SD-9 GWh goal

# Building Energy Efficiency Outcomes and Investments



# Requested Action

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- Amend Strategic Direction SD-9, Resource Planning to the proposed language change and establish attributable building decarbonization metrics in place of GWh metrics.
- The Natural Resources Defense Council (NRDC), strongly supports approval of our SD-9 proposal.